Oral cancer awareness among group of general dental practitioners in Iraq

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ABSTRACT

Background: The early detection of oral cancers gives the greatest chance of curing and the delay in presentation has a significant impact on the associated morbidity and mortality. The lack of general dental practitioners (GDP) knowledge in early cancer detection has been shown to contribute to delays in referral and treatment. The aim of this study was to investigate the oral cancer awareness among a group of GDP by assessing their knowledge of detection and prevention of oral cancer.

Materials and methods: A questionnaire based study was designed. The questionnaire was delivered to 200 GDP assessing oral examination method, knowledge of oral cancer risk factors, clinical appearance and the most common site, point of referral and requests for further information.

Results: A response rate of 69% was obtained. The GDP were less likely to examine the oral mucosa than other similar studies in other countries, and also less likely to advice patient about risk factors. Smoking and alcohol use wereidentified as risk factors by 96.3% and 43.48% of the GDP respectively. Only 37.7% of GDP believed they had sufficient knowledge of oral cancer, and more than 94% believed they need further information about oral cancer.

Conclusion: This study highlights need for more education of the GDP on oral cancer.

Keywords: Oral cancer, general dentists, awareness, Iraq. **(J Bagh Coll Dentistry 2014; 26(1):108-111).**

INTRODUCTION

In many parts of the world oral cancer is considered a major health problem, especially in the developing countries [1]. Globally, oral cancer ranks eleventh between the most common cancers, where more than 500,000 patients are estimated to have oral cancer globally and with approximately 389,000 new cases per annum [2]. Many epidemiological studies have revealed that incidences of oral cancer increased with smoking, alcohol intake and age [3].

Typically, oral cancers some time take several years to progress to advanced stages; treatment of oral cancer in earlier stage is less complicated with higher survival rate [4]. Otherwise the advanced stage needed invasive treatment which may lead to poorer quality of life and disfigurement for patients [4]. Therefore, oral cavity examination of dental patients by inspection and palpitation is essential for early detection of suspected oral cancer. GDP already have easy accessibility to the populations' of oral cavity; hence they arguably bear the greats share of responsibility in detection and diagnosis of oral cancer [5]. So the aim of this study is to assess the level of knowledge, attitudes and behaviors of GDP toward oral cancer.

MATERIALS ANDMETHODS

This descriptive cross sectional study was conducted using self-administrated questionnaire, which has been designed and used by Carter and Ogden [6]. The questionnaire was tested on 20 GDP as a pilot study to assess uniformity of interpretation, and there was no major corrections were necessary.

The list of GDP was obtained from Iraqi Dental Association. A total of 200 (120 males / 80 females) GDP, working in different Iraqi provinces, were selected to participate in the study. The GDP received the questionnaire through their personal E-mail and were kindly asked to return the filled questionnaire in 14 days. Ten questions were designedto investigate whether the GDP screen the oral mucosa during routine examination, especially if patient was at high risk to oral cancer. The questionnaire also assess the dentists knowledge about the risk factors for oral cancer, and if they educate their patients about such factors.

The questionnaire also designed to assess the GDP knowledge regarding the different clinicalappearance, the associated changesof oral cancer and the most common sites for oral cancer. The questions also screened the GDP point of view regarding referring the suspected oral cancer patient and their opinion about the sufficiency of their individual knowledge on oral cancer detection, and prevention and if they need information further information regarding oral cancer. The questionnaire estimated to require approximately 10 minutes to be completed.

RESULTS

The questionnaire was returned by 143 GDP, five of them uncompleted, hence were excluded from the analysis. Finally, the total of accepted questionnaires was 138 which represented 69% from the sent questionnaires.

The characteristic of participated GDP is shown the Table1. Only 80 (57.9%) GDP reported that they routinely examine oral mucosa of their patients, while 8 (5.8%) only screen mucosa if the patient was of the cancer risk group (Table 2).

When asked the dentists "what would you considered as a risk factors for oral cancer" in open question, which provided wide range of responses, therefore responses in relation was merged groups of responses and the details are shown in the Table 3.

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Smoking 96.3% (133), dental factors 94.2% (132) and alcohol 43.48% (60) were identified as the most frequent risk factor and only 3% (5) identified consumption alcohol and smoking together was more high risky. The details are shown in the Fig.1.

In this study, 50 (36.2%) advice the patient about the risk factor and 62.3% (86) of dentists felt unconfident about diagnosis oral cancer appearance.

The answer to the open question "what changes within the mouth could be associated with oral cancer" ulceration 73.9%, mass 38.4% and leukoplakia 20.3% was the frequent answers, Figure 2 shows the answers to this question.

Another open question "where do you think most common sites for oral cancer" 71% answered the lateral side of the tongue the most common site and the details of answers are seen in the Fig.3

About 76.1% preferred to refer the patient to maxillofacial surgery while 94.2% (130) like more training and information about oral cancer and most of them prefer continuous education program.

DISCUSSION

This study was the first study to assess oral cancer awareness among Iraqi dentists. This study used three open ended questions to evaluate knowledge regarding oral cancer risk factors, appearance and site. The number of questions was kept to a minimum to encourage the responses and appeared to work well when previously employed.

A total of 57.9% of the sample routinely examines patients' oral mucosa. Screening the oral mucosa was lower than found in similar studies on general dentist and student in UK [6,7].

From participants who declared that they don't screen patients' oral mucosa 13.7% only screened the mucosa of risky patient and this also was lower than previous mentioned studies.

Smoking as a risk factor was well identified from the responder, which most reports clearly established a direct causal relationship between cigarette smoking and cancer of oral cavity [8], whereas alcohol was poorly identified as a risk factor.

In spite of the strong relationship between oral cancer and alcohol consumption [9], thus the role of alcohol as a risk factor for oral cancer has to be emphasis in future. The combination of smoking and alcohol consumption exert a synergistic effect that substantially increases the risk factor [10]. The priority to dental factors that gave from responder as a risk factor but there little evidence suggest that poor oral hygiene, improper fitting denture border misaligned or sharp teeth [11,12].

Dentist mostly identified ulceration and mass as oral changes. These results do not coincide with previous study in UK and Canada [6,7,13]. The ulceration was well indicated by the dentists, but erythroplakia and erythroleukoplakia were not well indefinite in spite of the malignant transformation rate of erythroplakia and erythroleukoplakia which could be at least 50% [14]. The level of knowledge towards leukoplakia has slightly higher than erythroplakia but still under than that required. It is well known that leukoplakia has less malignant potential than erythroplakia; however non-homogenous, speckled and nodular types of leukoplakia can have similar rates of malignant transformation compared with erythroplakia[15].The lateral border of tongue and floor the mouth were the most common sites mostly identified by the responders. Actually the epidemiological studies have shown that the sites of occurrence for oral cancer differ widely, but the tongue, lip, and floor of the mouth are the most frequent sites of squamous cell carcinoma in the oral cavity[16].

Fewer dentists believed they had sufficient knowledge regarding oral cancer prevention and detection. More than 94% of the dentists needed more information regarding oral cancer, which is almost similar to the results of previous studies in UK [6, 7].

This study showed poor level of awareness among the GDP regarding oral cancer. Therefore, extensive continuous education programs in oral cancer arenecessary in Iraq to increase the level of awareness about oral cancer for GDPs.

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Table1: Demographic and practice characteristic of respondents

Characteristic	N	%	Mean± SD
Gender	138		
Male	80	58%	
Female	58	42%	
Age	138		35.18± 9.188
Male	80		34.86± 9.385
Female	58		35.62± 8.973
Year of graduation			
1971-1975	3	2.17%	
1976-1980	4	2.90%	
1981-1985	3	2.17%	
1986-1990	15	10.87%	
1991-1995	13	9.42%	
1996-2000	17	12.32%	
2001-2005	39	28.26%	
2006-2010	26	18.84%	
2011-	18	13.04%	
Region of work			
Baghdad	72	52.17%	
Kurdistan region	14	10.14%	
South of Iraq	14	10.14%	
West of Iraq	18	13.04%	
Middle Euphrates region	20	14.49%	

Table 2: Distribution of response to question

Questions	Yes			No		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**
Do you examine patients' oral mucosa routinely?	106 (76.8%)	65 (81.3%)	41 (70.7%)	32 (23.2%)	15 (18.7%)	17 (29.3%)
Do you inform your patients about the risk factors for oral cancer?	50 (36.2%)	31 (38.8%)	19 (32.8%)	88 (63.8%)	49 (61.2%)	39 (67.2%)
Do you feel that you have sufficient knowledge concerned with detection and prevention of oral cancer?	52 (37.6%)	27 (33.8%)	25 (43.1%)	86 (62.4%)	53 (66.2%)	33 (56.9%)
Would you like more information or training on oral cancer?	130 (94.2%)	74 (92.5%)	56 (96.6%)	8 (5.8%)	6 (7.5%)	2 (3.4%)

Table 3: Risk factors for oral cancer

Smoking
Alcohol
UV light exposure
Human papilloma virus
Dental factor: Sharp tooth or filling Bad oral hygiene Ill-fitted denture
Dietary factor: Vitamin deficiency Spicy food High fat diet

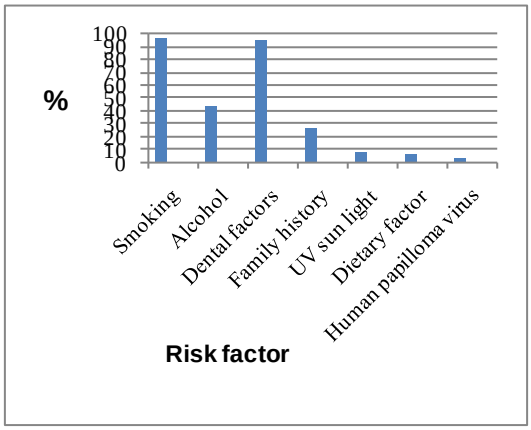

Figure 1: Distribution of risk factors identified

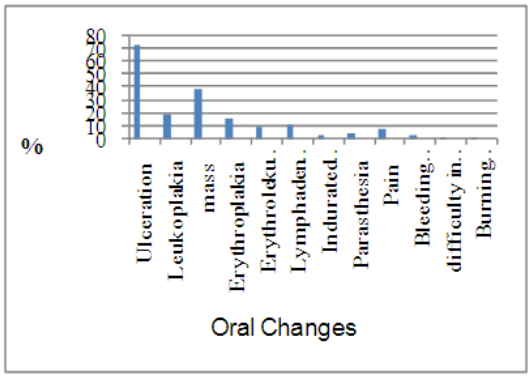

Figure 2: Distribution of oral changes identified

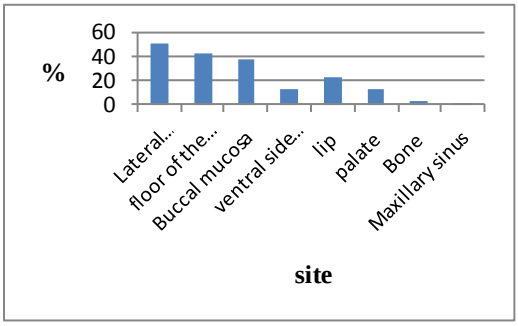

Figure 3: Distributions of most common site